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FILING DATE APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/291,426 04/13/99 JAMES K P-22577GUSA **EXAMINER** HM22/0216 PETER J BUTCH III SYNNESTVEDT & LECHNER HSU, G 2600 ARAMARK TOWER **ART UNIT** PAPER NUMBER 1101 MARKET STREET 1627 5 PHILADELPHIA PA 19107 DATE MAILED: 02/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No. 09/291,426

Applicant(s)

Examiner

Grace Hsu, Ph.D.

Group Art Unit

Kohn et al.

1627



| X Responsive to communication(s) filed on Jun 23, 1999 | • |
|---|---|
| This action is FINAL . | |
| Since this application is in condition for allowance except for f in accordance with the practice under Ex parte Quayle, 1935 | |
| A shortened statutory period for response to this action is set to estimate something something the something date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a). | respond within the period for response will cause the |
| Disposition of Claims | |
| | is/are pending in the application. |
| Of the above, claim(s) | is/are withdrawn from consideration. |
| ☐ Claim(s) | |
| ☐ Claim(s) | |
| Claim(s) | |
| | |
| Application Papers | |
| ☐ See the attached Notice of Draftsperson's Patent Drawing | Review, PTO-948. |
| ☐ The drawing(s) filed on is/are objected | d to by the Examiner. |
| ☐ The proposed drawing correction, filed on | is approved disapproved. |
| $\hfill\Box$ The specification is objected to by the Examiner. | |
| $\hfill\Box$ The oath or declaration is objected to by the Examiner. | |
| Priority under 35 U.S.C. § 119 | |
| Acknowledgement is made of a claim for foreign priority un | nder 35 U.S.C. § 119(a)-(d). |
| ☐ All ☐ Some* ☐ None of the CERTIFIED copies of t | the priority documents have been |
| ☐ received. | |
| received in Application No. (Series Code/Serial Number | per) |
| \square received in this national stage application from the Ir | |
| *Certified copies not received: | |
| ☐ Acknowledgement is made of a claim for domestic priority | under 35 U.S.C. § 119(e). |
| Attachment(s) | |
| ☐ Notice of References Cited, PTO-892 | |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(| s) |
| ☐ Interview Summary, PTO-413 | |
| Notice of Draftsperson's Patent Drawing Review, PTO-948 | |
| □ Notice of Informal Patent Application, PTO-152 | |
| | |
| SEE OFFICE ACTION ON TH | IE FOLLOWING PAGES |

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DETAILED ACTION

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1627 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is (703) 305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Donald E. Adams, Ph.D., Supervisory Examiner at Donald.Adams@uspto.gov or 703-308-0570. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

- 1. The Preliminary Amendment filed June 2, 1999 was received and entered as Paper No. 4.
- 2. Claims 1-85 are currently pending.

Election/Restriction

- 3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-27, drawn to a multidimensional copolymer array, classified in class 528, subclass 291 and in class 435, subclass 7.1.
 - II.—Claims 28-62, drawn-to-methods for determining the effect of independently varying at least two different structural features of a copolymer, classified in class 526, subclass 59 and in class 435, subclass 7.1.
 - III. Claims 63-68, drawn to a polyacrylate compound, classified in class 528, subclass 291.
 - IV. Claims 69-73, drawn to a tyrosine-derived diphenol compound, classified in class 560, subclass 43.
 - V. Claims 74-79, drawn to a poly(amide ester) compound, classified in class 528, subclass 291.
 - VI. Claims 80-85, drawn to an aliphatic-aromatic dihydroxy monomer compound, classified in class 560, subclass 43.

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4. The inventions are distinct, each from the other, because of the following reasons:

5. Group I and Group II represent separate and distinct inventions.

Group I is different from Group II in that Group I is drawn to a multidimensional copolymer array (comprised of a composition or a collection of compounds, copolymers, etc., which have biological, therapeutic or some other functional uses), while Group II are drawn to methods for determining the effect of independently varying at least two different structural features of a copolymer (which recites required steps for the preparation of a particular product). Therefore, Group I and Group II have different issues regarding patentability and enablement and represent patentably distinct subject matter, which merits separate and burdensome searches.

6. Group I and Groups III, IV, V and VI represent separate and distinct inventions. Group I is different from Groups III, IV, V and VI in that Group I is drawn to a multidimensional copolymer array (comprised of a composition or a collection of compounds, copolymers, etc., which have biological, therapeutic or some other functional uses), while Groups III-VI are drawn to different compounds (as represented by different chemical structures, which have different physical and chemical properties; i.e., Group III, drawn to a polyacrylate compound; Group IV, drawn to to a tyrosine-derived diphenol compound; Group V, drawn to a poly(amide ester) compound and Group VI, drawn to an aliphatic-aromatic dihydroxy monomer compound). Therefore, Group I and Group III-VI have different issues regarding patentability and enablement and represent patentably distinct subject matter, which merits separate and burdensome searches.

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- 7. Group II and Groups III, IV, V and VI represent separate and distinct inventions.

 Group II is different from Groups III, IV, V and VI in that Group II are drawn to methods for determining the effect of independently varying at least two different structural features of a copolymer (which recites required steps for the preparation of a particular product), while Groups III-VI are drawn to different compounds (as represented by different chemical structures, which have different physical and chemical properties; i.e., Group III, drawn to a polyacrylate compound; Group IV, drawn to to a tyrosine-derived diphenol compound; Group V, drawn to a poly(amide ester) compound and Group VI, drawn to an aliphatic-aromatic dihydroxy monomer compound). Therefore, Group II and Group III-VI have different issues regarding patentability and enablement and represent patentably distinct subject matter, which merits separate and burdensome searches.
- 8. Groups III, IV, V and VI represent separate and distinct inventions. Groups III-VI are drawn to different compounds (as represented by different chemical structures, which have different physical and chemical properties; i.e., Group III, drawn to a polyacrylate compound; Group IV, drawn to to a tyrosine-derived diphenol compound; Group V, drawn to a poly(amide ester) compound and Group VI, drawn to an aliphatic-aromatic dihydroxy monomer compound). Therefore, Groups III-VI have different issues regarding patentability and enablement and represent patentably distinct subject matter, which merits separate and burdensome searches.
- 9. These inventions are distinct for the reasons above and have acquired a separate status in the art because of their recognized divergent subject matter and/or shown by their different

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classifications. While some of the aforementioned groups are classified under an identical class/sub-class, the corresponding non-patent literature search remains unaffected. Each of the identified groups may require different searches. For example, methods and products groups require different searches. Therefore, restriction for examination purposes as indicated is proper.

- 10. This application contains claims directed to the following patentably distinct species of the claimed invention.
- 11. If applicants elect the invention of **Group I**, applicants are required to further elect from the following patentably distinct **Species A** of the claimed invention:

| Species A | <u>claim no.</u> | The copolymer array of claim 1, wherein said separate reactions are: |
|-----------|------------------|--|
| (1) | claim 4 | performed in parallel |
| (2) | claim 5 | performed in solution |
| (3) | claim 6 | performed in bulk |
| (4) | claim 7 | performed in the presence of a catalyst |
| (5) | claim 8 | performed in the absence of a catalyst |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

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12. If applicants elect the invention of **Group I**, applicants are required to further elect from the following patentably distinct **Species B** of the claimed invention:

| Species B | <u>claim no.</u> | The copolymer array of claim 10, wherein said condensation reaction is: |
|------------|----------------------|---|
| (6) (7) | claim 11 claim 12 | an interfacial process a suspension process |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

Applicants are required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

13. If applicants elect the invention of **Group I**, applicants are required to further elect from the following patentably distinct **Species C** of the claimed invention:

| Species C | claim no. | The copolymer array of claim 10, wherein said separate reactions are: |
|-----------|-----------|---|
| (8) | claim 13 | performed in parallel |
| (9) | claim 14 | performed in solution |
| (10) | claim 15 | performed in bulk |
| (11) | claim 16 | performed in the presence of a catalyst |
| (12) | claim 17 | performed in the absence of a catalyst |

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Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

Applicants are required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

14. If applicants elect the invention of **Group I**, applicants are required to further elect from the following patentably distinct **Species D** of the claimed invention:

| Species D | <u>claim no.</u> | The copolymer array of claim 20, wherein said First monomer series comprises: |
|--------------|----------------------|---|
| (13) (14) | claim 21 claim 22 | a plurality of different diphenol compounds a plurality of different aromatic-aliphatic dihydroxy compounds |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

Applicants should provide the chemical structure of the elected species, wherein the specific chemical formula substituents of that the elected species are defined either by picture or by expressing the species in terms of the variables of the formula.

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Applicants are required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

15. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species F** of the claimed invention:

| Species F | <u>claim no.</u> | The method of claim 28, wherein said polymerization_reaction is a: |
|-----------|------------------|--|
| (15) | claim 31 | performed in parallel |
| (16) | claim 32 | performed in solution |
| (17) | claim 33 | performed in bulk |
| (18) | claim 34 | performed in the presence of a catalyst |
| (19) | claim 35 | performed in the absence of a catalyst |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

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16. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species G** of the claimed invention:

| Species G | claim no. | The method of claim 28, wherein said end-use property that is measured is: |
|-----------|-----------|--|
| (20) | claim 38 | a mechanical property, a viscoelastic property, a morphological property, an electrical property, an optical property, solute or gas permeability, surface tension or a thermal property |
| (21) | claim 39 | antibacterial activity, blood compatibility, tissue compatibility, drug release characteristics, biological interactions with living organisms, hydrolytic degradation or protein adsorption characteristics |
| (22) | claim 40 | polymer processability, radiation stability, sterilizability, adhesive properties, hydrophobic characteristics or stability to specific reaction conditions |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

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17. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species H** of the claimed invention:

| Species H | <u>claim no.</u> | The method of claim 41, wherein said condensation- type copolymers are: |
|-----------|------------------|--|
| (23) | claim 42 | prepared by an interfacial process |
| (24) | claim 43 | prepared by a suspension process |
| (25) | claim 44 | synthesized in parallel |
| (26) | claim 45 | polymerized in solution |
| (27) | claim 46 | polymerized in bulk |
| (28) | claim 47 | polymerized in the presence of a catalyst |
| (29) | claim 48 | polymerized in the absence of a catalyst |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

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18. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species I** of the claimed invention:

| Species I | claim no. | The method of claim 51, wherein said First monomer series comprises: |
|-----------|-----------|--|
| (30) | claim 52 | a plurality of different diphenol compounds |
| (31) | claim 53 | a plurality of different aromatic-aliphatic dihydroxy compounds |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

Applicants should provide the chemical structure of the elected species, wherein the specific chemical formula substituents of that the elected species are defined either by picture or by expressing the species in terms of the variables of the formula.

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19. If applicants elect the invention of **Group II**, applicants are required to further elect from the following patentably distinct **Species J** of the claimed invention:

| Species J | claim no. | The method of claim 41, wherein said end-use property that is measured is: |
|-----------|-----------|--|
| (32) | claim 60 | a mechanical property, a viscoelastic property, a morphological property, an electrical property, an optical property, solute or gas permeability, surface tension or a thermal property |
| (33) | claim 61 | antibacterial activity, blood compatibility, tissue compatibility, drug release characteristics, biological interactions with living organisms, hydrolytic degradation or protein adsorption characteristics |
| (34) | claim 62 | polymer processability, radiation stability, sterilizability, adhesive properties, hydrophobic characteristics or stability to specific reaction conditions |

Each of the species identified above represents patentably distinct subject matter. In the instant case, those species each involve different structures and modes of action. Therefore, those species involve different patentability and enablement issues.

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- 20. Applicants are advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- Upon the allowance of a generic claim, applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicants must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 22. Should applicants traverse on the ground that the species are not patentably distinct, applicants should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- Applicants are advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 24. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

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amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the

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fee required under 37 CFR 1.17(I).

Conclusion

25. Any inquiry concerning this communication or earlier communications from the Examiner

should be directed to Grace C. Hsu, Ph.D., J.D. whose telephone number is (703) 308-7005. The

Examiner may be reached during normal business hours, Monday through Friday from 8:30 am to

6:00 pm (EST). A message may be left on the Examiner's voice mail.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Donald E. Adams, Ph.D., J.D. may be reached at (703) 308-0570. The fax number

assigned to Group 1627 is (703) 305-4242. Any inquiry of a general nature or relating to the

status of this application should be directed to the Group 1627 receptionist whose telephone

number is (703) 308-0196.

Grace C. Hsu, Ph.D. February 14, 2000

PRIMARY EXAMINER

2/14/00